

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of October 5, 2005 is respectfully requested.

The original specification has been slightly amended as indicated above in order to make various editorial changes. In particular, antecedent basis has been inserted into the specification for the new language used in the claims. However, it is submitted that these modifications are fully supported by the original disclosure, and no new matter has been added. Thus, the Examiner is respectfully requested to enter the changes to the specification.

Claims 1-14 were originally pending in this application. In the outstanding Office Action, the Examiner rejected claims 1, 2, 10, and 13 as being anticipated by the Andou reference (US 6,197,407); rejected claims 1 and 2 as being anticipated by the Chen '335 reference (US 6,346,335); rejected claims 1, 2, and 10-14 as being anticipated by the Hayashi reference (US 6,359,235); and rejected claims 1-5 and 10-14 as being unpatentable over the Andou reference, the Chen '335 reference, or the Hayashi reference in view of the Chen '363 reference (US 5,250,363). In item 7 on page 6 of the Office Action, however, the Examiner indicated that dependent claims 6-9 contain allowable subject matter. In view of the above, the original claims have been cancelled and replaced with new claims 15-28. For the reasons discussed below, it is respectfully submitted that the new claims are clearly patentable over the prior art of record.

Independent claims 15-17 were each drafted to include the subject matter of original base independent claim 1 and allowable dependent claims 6-8, respectively. Therefore, in view of the Examiner's indication of allowable subject matter, it is respectfully submitted that independent claims 15-17 and dependent claim 18 are now in condition for allowance.

A discussion of the arrangement and advantages of the wiring board as recited in new independent claim 19 will now be provided with reference to various portions of the present application, including the drawings and the specification. However, reference to any particular portions of the application is provided only for illustrative purposes, and is not intended to otherwise limit the scope of the claims.

As illustrated in, for example, Figure 1(f) of the present application, the wiring board of independent claim 19 comprises an electrically insulating substrate 104 and a wiring layer 103 formed on a surface of the electrically insulating substrate 104 by transferring the wiring layer 103 from a carrier base 101 of a wiring transfer sheet 100 (see Figure 1(c)). An exposed portion of the surface of the electrically insulating substrate 104 (i.e., the portion of the top surface of the electrically insulating substrate 104 on which the wiring layer 103 is formed which is not covered by the wiring layer) is an *exposed rough surface* having a plurality of convexities 130. An exposed surface of the wiring layer 103 (i.e., the top surface of the wiring layer 103 not contacting the electrically insulating substrate 104) is an *exposed rough surface* having a plurality of convexities. As explained in, for example, paragraphs [0098] and [0099] of the specification and illustrated in Figure 1(f), the surface shape of the exposed rough surface of the electrically insulating substrate 104 is substantially the *same* as the surface shape of the exposed rough surface of the wiring layer 103.

The reason that the surface shape of the exposed rough surface of the electrically insulating substrate is substantially the same as the surface shape of the exposed rough surface of the wiring layer is because, as illustrated in Figure 1(a) through Figure 1(c), the carrier base 101 of the transfer sheet 100 has concavities 120 formed therein, and the concavities 120 are used to form *both* the exposed rough surface of the wiring layer 102/103 *and* the exposed rough surface of the electrically insulating substrate 104. Therefore, as explained in lines 10-14 of paragraph [0099] of the specification, the surface of the wiring board having the exposed rough surface of the electrically insulating substrate 104 and the exposed rough surface of the wiring layer 103 will strongly adhere to an adjacent resin layer stacked thereon. Thus, as illustrated in Figure 8(c) and explained in paragraph [0157], a wiring board with multiple electrically insulating substrates 806 can be formed, and the electrically insulating substrates will tightly adhere to each other.

In the outstanding Office Action, the Examiner asserted that each of the Andou reference, the Chen '335 reference, and the Hayashi reference teaches a printed wiring board including a wiring transfer sheet and an insulating substrate, and that the insulating substrate has a surface complimentary to a surface of the wiring transfer sheet. However, the Examiner acknowledged

that those references do not teach that a surface of the insulating substrate has a plurality of convexities or that the surface of a transfer sheet has a plurality of convexities.

Nonetheless, the Examiner asserted that the Chen '363 reference teaches a printed circuit board including a conductive foil (wiring layer) 12 and a dielectric substrate 32, as shown in Figure 3. The Examiner also asserted that the dielectric substrate 32 has a plurality of convexities and the conductive foil 12 has a plurality of concavities so that the bonding surface of the dielectric substrate 32 can conform to the surface of the conductive foil 12. However, it is submitted that the Chen '363 reference does not disclose or even suggest a wiring board comprising an electrically insulating substrate having an *exposed* rough surface having a plurality of convexities, and a wiring layer formed on a surface of the electrically insulating substrate, in which the wiring layer also has an *exposed* rough surface having a plurality of convexities. In fact, the Chen '363 reference does not disclose *any* exposed surface of the electrically insulating substrate. Thus, the Chen '363 reference also does not disclose or suggest that the surface shape of the exposed rough surface of the electrically insulating substrate is substantially the *same* as the surface shape of the exposed rough surface of the wiring layer.

As the Examiner acknowledged, the Andou reference, the Chen '335 reference, and the Hayashi reference do not disclose or suggest a surface of an insulating substrate having a plurality of convexities. Thus, those references also do not disclose or suggest an electrically insulating substrate having an *exposed* rough surface having a plurality of convexities. Furthermore, those references also do not disclose or suggest a wiring layer formed on the surface of the electrically insulating substrate and having an exposed rough surface having a plurality of convexities, and do not disclose or suggest that a surface shape of the exposed rough surface of the electrically insulating substrate is substantially the same as the surface shape of the exposed rough surface of the wiring layer.

As explained above, the Andou reference, the Chen '335 reference, the Hayashi reference, and the Chen '363 reference do not, either alone or in combination, disclose or suggest an electrically insulating substrate and a wiring layer each having an exposed rough surface as recited in new independent claim 19. Therefore, one of ordinary skill in the art would not be

motivated to modify or combine these references so as to obtain the invention recited in new independent claim 19. Accordingly, it is respectfully submitted that new independent claim 19 and the claims that depend therefrom are clearly patentable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. However, if the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the Applicant's undersigned representative.

Respectfully submitted,

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